REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-14 and 16-23 are presently active in this case, Claims 1, 2, 13-14 and 19-20 amended, Claim 15 canceled and Claims 21-23 added by way of the present Amendment.

In the outstanding Office Action, Claims 1, 2, 6 and 10 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,847,014 to Benjamin et al.; Claims 1, 2 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,290,381 to Nozawa et al.; Claims 1, 2 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,078,851 to Nishihata et al. in view of Benjamin et al.; Claims 1-8, 11, 12 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,846,375 to Gilchrist et al. in view of Nozawa et al. or Nishihata et al.; Claims 1-13 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,753,272 to Lee et al. in view of Nozawa et al. or Benjamin et al.; Claims 1-8 and 11-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,664,738 to Arai et al.; Claims 1-8 and 11-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. in view of Nozawa or Benjamin et al.; Claims 13-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,949,722 to Strang et al.; Claims 13-20 were rejected under 35 U.S.C. § 103(a) over Arai, Lee or Gilchrist et al. in view of Strang et al.; Claims 15-17, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Benjamin et al. and Claims 13 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Benjamin et al. in view of Nishihata et al.

Turning now to the merits, in order to expedite issuance of a patent in this case, Applicants have amended independent Claim 1 to clarify the patentable features of the

present invention over the cited references. Specifically, Applicants' independent Claim 1 recites a thermally zoned substrate holder having a base upper portion having top and bottom surfaces, the top surface configured to support a substrate and the bottom surface having a recess formed therein. A plurality of temperature control elements are provided inside the recess, each element having a top surface seated in the recess and a bottom surface forming a floor of the recess. Also recited is at least one thermal insulator having a lower coefficient of thermal conductivity than a material of the base, the at least one insulator being positioned within the recess and disposed between the plurality of temperature control elements and substantially thermally separating the plurality of temperature control elements. Finally, a base lower portion is positioned within the recess and seated to the floor of the recess to substantially fill the recess.

Thus, Applicants' independent Claim 1 has been amended to recite a base upper portion having a recess, in which a plurality of temperature control elements separated by a thermal insulator are placed, and in which a base lower portion is placed to substantially fill the recess. As indicated by paragraphs [0007] and [0049] - [0053], this configuration allows a conventional substrate holder to be configured as a thermally zoned substrate holder assembly in a simple and inexpensive manner. Therefore, the amendments to Claim 1 do not raise an issue of new matter. Further, none of the cited references disclose these features as now claimed in Claim 1.

The newly cited reference to Benjamin et al. discloses a multilayer substrate holder having a base 302 with a thermal insulator 304 formed thereon, and a support 306 formed upon the thermal insulator. Embedded within the support 306 are a plurality of heaters 308 and temperature sensors 309. There is no discussion in Benjamin et al. of the support 306 or any other portion of the substrate holder having an upper portion having a recess in which a plurality of temperature control elements separated by a thermal insulator are placed, and in

which a lower portion is placed to substantially fill the recess. Thus, Claim 1, as amended patentably defines over Benjamin et al.

The previously cited references to Nozawa et al., Nishihata et al. and Gilchrist et al., disclose substrate holders having either a multiple layer configuration or an integral substrate holder with a temperature control element embedded therein. The previously cited reference to Lee discloses a substrate support for supporting a peripheral region of the substrate such that the backside of the substance is exposed to transfer device 20. Thus, Nozawa et al., Nishihata et al., Gilchrist et al. and Lee et al. do not disclose an upper portion having a recess in which the temperature control elements, thermal insulator and lower portion are placed as recited in Applicants' independent Claim 1.

Further, as discussed in the May 19, 2006 Amendment, Nishihata et al. and Nozawa et al. do not disclose temperature control elements provided "inside the base," and the cited reference Gilchrist also does not disclose at least one insulator being disposed between a plurality of temperature control elements as still required by Applicants' Claim 1, as amended. Still further, Applicants' December 20 and May 19 Amendments explained that the cited reference to Lee et al. does not disclose a substrate holder with a plurality of temperature control elements at all. These distinctions provide an additional basis for patentability of amended Claim 1 over the cited references. The final Action maintains the rejection based on Nozawa et al., Nishihata et al., Gilchrist et al., and Lee et al. without addressing any of the above distinctions. Applicants respectfully request that any future Office Action address these arguments so as to narrow the issues for appeal in this case.

The cited reference to Arai et al. discloses a substrate holder having an electrode block 1 and a plurality of flow path slits 11 and 12 which carry temperature controlled fluids therein. Also shown in Figure 2 of Arai et al. is an insulating slit 13 for carrying an insulating gas for suppressing heat transfer between the slits 11 and 12. As seen in Figure 2,

the temperature control slits 11 and 12 and the insulating slit are formed as cavities within the electrode block 1, and a guide member 2 and base member 3 are simply provided over these slits. Therefore, Arai et al. does not disclose a substrate holder having a base upper portion having a recess in which a plurality of temperature control elements separated by a thermal insulator are placed, and in which a base lower portion is placed to fill the recess as required by Applicants' independent Claim 1.

Moreover, Claim 1 would not be obvious from Arai et al. As described in paragraph [0007] of Applicants' specification, an objective of the presently claimed invention is to provide a multi-zone substrate temperature control apparatus that can be simply and inexpensively installed and maintained. As noted above, the configuration now claimed in Claim 1 satisfies this need. Neither Arai et al. nor any of the other cited references provide motivation for configuring the substrate holder to have a base upper portion, a base lower portion and a plurality of temperature control elements separated by a thermal insulator as required by Claim 1.

Finally, the May 19, 2006 Amendment explained that the cited reference to Strang et al. is disqualified as prior art under 35 U.S.C. § 103(c). However, the outstanding final Action maintains the rejection in view of Strang et al.. Applicants submit that this is improper and request that the rejections based on Strang et al. be withdrawn.

For the reasons discussed above, Claim 1 patentably defines over the cited references, and claims depending therefrom also patentably define over the cited references. Nevertheless, new claims 21-23 have been added to recite detailed structural features that further distinguish these claims from the cited references.

Consequently, in view of the present Amendment, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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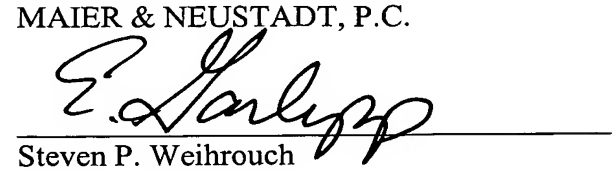

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